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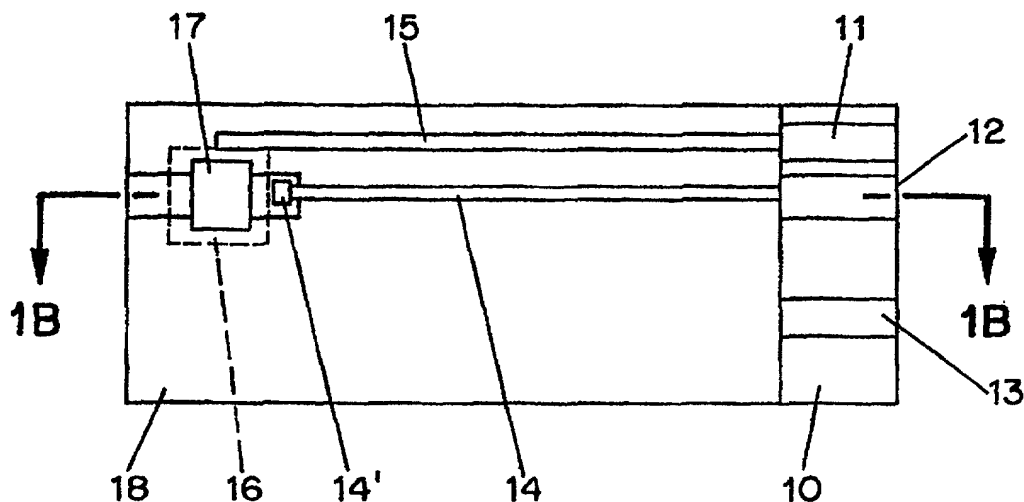
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(54) Title: DISPOSABLE TEST STRIPS WITH INTEGRATED REAGENT/BLOOD SEPARATION LAYER



## (57) Abstract

An improved disposable glucose test strip for use in a test meter of the type which receives a disposable test strip and a sample of blood from a patient and performs an electrochemical analysis using a non-conductive integrated reagent/blood separation layer (17) containing a filler, an enzyme effective to oxidize glucose, e.g., glucose oxidase, and a mediator effective to transfer electrons from the enzyme. The integrated layer formulation is printed over a conductive carbon element (16) to form a working electrode. The filler, for example a silica filler, is selected to have a balance of hydrophobicity such that on drying it forms a two-dimensional network on the surface of the conductive element. The response of this test strip is essentially temperature independent over relevant temperature ranges and is substantially insensitive to the hematocrit of the patient.